# SCHOOL OF COMPUTER SCIENCE

# **Doctoral students Checklist**

(Effective Spring 2022)

This is to be used in conjunction with the checklist printed in the general catalog. *All Graduate College and University requirements apply* {https://www.ou.edu/gradcollege/forms-and-policies/steps-to-degree}.

Prerequisites
Complete the admission prerequisites.
All prerequisites finished with B or better on the first attempt.
Dissertation Advisor
Select a member of the graduate faculty in Computer Science with an M3 or RM4 status as dissertation advisor.
Timing note: selection of dissertation advisor must be accomplished within the first year and can be accomplished while taking prerequisites.
Advisory Committee
Form advisory committee, which becomes the Doctoral Committee later and includes the dissertation advisor plus at least three more graduate faculty members (total of four) with M2 or RM3 status or higher.
Majority of the advisory committee must be members of the School of Computer Science.
Special membership appointment: One of the committee members, including the co-advisor, may be a faculty member with SM status if the committee has more than four members. See the Graduate College website on graduate faculty appointment for details: {https://www.ou.edu/gradcollege/faculty-and-staff/graduate-faculty-appointments}
At least one committee member must be from outside the School of Computer Science and the field of computer science.
Complete the <i>Report of the Advisory Conference</i> form and submit it to the Graduate College. A pre-advisory conference report form must be completed, per your request, by the academic programs coordinator and signed by the graduate liaison.
Reference note: for details see Advisory Conference Procedures for CS Doctoral Students.

Timing note: Advisory Conference should be held within the first year.

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#### **Coursework Requirements**

Required Coursework
\*Please see listing below

## **Mandatory courses:**

- CS 4413 Algorithm Analysis
- CS 4513 Database Management Systems

### 4 of the following 9 courses must be taken:

- CS 4613 Computer Architecture
- CS 5013 Artificial Intelligence
- CS 5033 Machine Learning
- CS 5113 Distributed Operating Systems
- CS 5133 Data Networks
- CS 5173 Computer Security
- CS 5213 Software Engineering Processes
- CS 5473 PDN Programming
- CS 5813 Formal Languages

#### One presentation course from the following list must be taken:

- CS 5033 Machine Learning
- CS 5073 Artificial Neural Networks and Evolution
- CS 5083 or CS 5593 Data Mining
- CS 5093 Visual Analytics
- CS 5113 Distributed Operating Systems
- CS 5143 Network Design & Management
- CS 5513 Advanced Database Management
- CS 5813 Formal Languages
- CS 5970 Introduction to Computational Learning Theory

\_\_\_\_\_ Students who have completed one or more of the required courses elsewhere may petition the graduate committee for a waiver from taking some or all required courses.

#### **Additional Coursework**

Beyond the required 18 credit hours (6 courses), a minimum of 27 to a maximum of 42 semester credit hours of additional graduate coursework is necessary beyond the B.S.

Total credit hours: 90 or more hours after B.S.
At least 30 hours and a maximum of 45 hours of dissertation research (CS 6980).
All courses must be taken for graduate credit ("G" prefix in the general catalog, no 3000 level courses or lower).
All PhD coursework must be taken within <u>6 years of admission to the Graduate College</u> .
Count no more than 12 credit hours in CS G4xxx level courses.
No more than 6 hours of independent studies (CS 6990 &/or CS 5990) can be counted towards the required minimum 45 hours of coursework.
External courses and transfer credit must be approved by the advisory committee.
No more than 6 credit hours in CS 5970 courses will be permitted, even with change of subject.
Maintain continuous enrollment of at least 2 credit hours of CS 6980 (Research for Doctoral Dissertation) after initial enrollment.
Attend at least 5 seminars/conferences through the duration of the program.  Timing Note: earliest initial enrollment of CS 6980 is during the semester in which the General Examination is taken.
General Examination
File application for general examination.  {OU Graduate College website: <a href="https://www.ou.edu/gradcollege/forms-and-policies/steps-to-degree">https://www.ou.edu/gradcollege/forms-and-policies/steps-to-degree</a> }
Pass the general exam, both written and oral presentation parts in no more than two attempts.
Reference note: for details see General Examination Procedures for CS Doctoral Students.
Timing note: Application to take General Examination can only be made after filing Advisory Conference report.
Timing note: General Examination should be scheduled during the semester in which the majority of coursework is complete or nearly complete.
Timing note: once the student has passed the General Examination, he/she cannot complete a M.S. in Computer Science simultaneously.
Dissertation Proposal
During the first year after completing their general examination, each doctoral student must submit a written dissertation proposal (prospectus) document and present it to their doctoral committee for feedback.

Research Progress Review
On an annual basis after passing the General Examination, the student will undergo a Research Progress Review conducted by the Doctoral Committee. The purpose of RPR is to evaluate the student's progress in conducting research during the previous year.
During each year following the completion of the dissertation proposal, each doctoral student must submit a written summary of their dissertation progress and changes to their dissertation plans (if any) during the previous year and present it to their doctoral committee for feedback.
The results of the RPR are either satisfactory or unsatisfactory.
If a student has unsatisfactory RPR results for 2 consecutive years, the student will be terminated from the program.
Professional presentations
During each year following the completion of their general examination, each doctoral student must prepare and deliver at least one presentation in a professional setting.
Annual Evaluation
Each doctoral student is evaluated by their advisor on an annual basis using a departmentally-supplied evaluation form.
This form indicates whether the evaluated student has satisfied the doctoral degree requirements for submitting a dissertation proposal and yearly progress reports.
This form also indicates whether the evaluated student has satisfied the doctoral degree requirement for professional presentations.
Publication
It is expected that all doctoral students submit for publication at least two (2) first author papers before graduation.
Dissertation
Final reading copy must be approved by the dissertation advisor.
Graduate College approves syntax and format of the dissertation.
The reading copy must be given to the Doctoral Committee members at least 2 weeks before the dissertation defense.
The final reading copy (PDF electronically available/Canvas or OneDrive) must be given to CS Academic Programs Coordinator 10 business days prior to defense (2 weeks). A soft copy of the abstract approved by the advisor is also given to the Academic Programs Coordinator at

the same time.

The student should work with the CS Academic Programs Coordinator to determine the location
of the dissertation defense at the earliest opportunity after approval from the Graduate College.
Pass the final dissertation defense on the first attempt.
After your committee has approved your final dissertation, submit the online Approval for Thesis/Dissertation Submission to SHAREOK form to the Graduate College. Submit your dissertation to the SHAREOK institutional repository, according to the instructions you received in the Graduate College email authorizing your defense. Your submission is due no later than 60 calendar days after your defense. If you plan to graduate in a particular semester, you must meet the semester submission deadline given on the Academic Calendar, usually the last day of the final examination period. One electronic copy of dissertation must be emailed to the CS Academic Programs Coordinator.
Graduation
Pay graduation fee in Bursar's office and complete all Graduate College forms.
Attend the School of Computer Science Exit Interview with the CS Director or a CS Board member.
Note: If deadline falls on a weekend, the next working day following the posted deadline will be acceptable.
*Graduate College - Degree Milestone/Progress to Degree Deadlines: <a href="https://www.ou.edu/gradcollege/forms-and-policies/steps-to-degree">https://www.ou.edu/gradcollege/forms-and-policies/steps-to-degree</a>

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